1- 9 canceled

10.(currently amended) A cyclone separator as recited in claim 14 ~~1~~, and further comprising an outwardly-flared lip at said outer opening.

11.(original) A cyclone separator as recited in claim 10, wherein all of said outer, upper, and lower walls flare outwardly at said lip.

12-13 canceled

14.(currently amended) A cyclone separator, comprising:

a cyclone body wall having a top and a bottom and defining a central vertical axis, said cyclone body wall forming a chamber having a circular cross-section, with the cyclone body wall having a larger first radius at the top and tapering to a smaller second radius at the bottom;

said cyclone body wall defining an outlet opening at the bottom; and

inner, outer, upper, and lower walls defining an inlet path into said cyclone chamber adjacent the top of said cyclone body wall, said inlet path defining an outer opening and an inner opening and extending from said outer opening to said inner opening, wherein said inner ~~side~~ wall of said inlet path has a constant radius that is substantially the same as the radius of said cyclone body wall adjacent the top of said cyclone body wall;

wherein said inner wall of said inlet path is a separate wall from said cyclone body wall and is centered on a different vertical axis from the central vertical axis of the cyclone body wall; and

wherein the angular distance along said inner side wall from said outer opening to said inner opening is in the range of 60° to 120°.

15.(canceled) A cyclone separator as recited in claim 14, wherein said inner wall of said inlet path is a separate wall from said cyclone body wall.

16.(canceled) A cyclone separator as recited in claim 15, wherein said inner wall of said inlet path conforms to said cyclone body wall along the entire inlet path.

17.(currently amended) A cyclone separator as recited in claim 14 ~~15~~, wherein ~~the radius of said inner wall is centered on a second vertical axis that is offset from said central vertical axis, and~~ said inner wall merges with said cyclone body wall at the inner opening.

18.(canceled) A cyclone separator as recited in claim 14, wherein said inner side wall of said inlet path is said cyclone body wall.

19.(original) A cyclone separator as recited in claim 14, wherein the height from said bottom wall to said top wall of said inlet path is constant.

20.(currently amended) A cyclone separator as recited in claim 19, wherein the width from said inner ~~side~~ wall to said outer ~~side~~ wall is constant.

21.(currently amended) A cyclone separator as recited in claim 19, wherein the width from said inner ~~side~~ wall to said outer ~~side~~ wall tapers from a larger width at said outer opening to a smaller width at said inner opening.

22.(original) A cyclone separator as recited in claim 14, and further comprising a vessel enclosing said cyclone body wall and said inlet path.

23.(original) A cyclone separator as recited in claim 14, wherein said outer wall of said inlet path becomes tangent to said cyclone body wall at a point and merges with said cyclone body wall at said tangent point.